Grendahl [45] [54] CYLINDRICALLY SEGMENTED ZONE OF FOCUS ARTIFICIAL LENS [76] Inventor: Dennis T. Grendahl, 2070 Shoreline Dr., Orono, Minn. 55422 [21] Appl. No.: 88,413 [22] Filed: Aug. 24, 1987 [51] Int. Cl.⁴ A61F 2/16 U.S. Cl. 623/6; 623/5; [52] 351/161; 351/168 [58] Field of Search 623/6; 351/168, 171, 351/161, 162 [56] References Cited U.S. PATENT DOCUMENTS 4,240,163 12/1980 Galin 623/6 4,655,565 4/1987 Freeman 623/6 4,666,446 5/1987 Koziol 623/6 4,704,016 11/1987 deCarle 351/161

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ABSTRACT

An implantable or contact lens for replacement of a defective natural lens in an eye in which various annular portions of the lens have different powers and focal lengths to produce in-focus images, on different portions of the retina, of objects which are located at various distances from the eye, thereby substituting for the natural focusing action of the eye. The image processing capability of the brain functions to largely ignore the out of focus images and concentrate on the in focus image of the object selected by the brain for consider-

19 Claims, 9 Drawing Sheets

